

three inches = one foot
one and one half inch = one foot
one inch = one foot
three-quarters inch = one foot
one-half inch = one foot
three-eighths inch = one foot
one-quarter inch = one foot
one-eighth inch = one foot

GENERAL NOTES	
1.	ALL ELECTRICAL EQUIPMENT SHOWN ON THE DRAWINGS AND/OR REQUIRED FOR THE FULL INTEGRITY AND COMPLETION OF THE CONTRACT SHALL BE FURNISHED, INSTALLED AND CONNECTED BY THE CONTRACTOR, EXCEPT WHERE EQUIPMENT SHOWN IS IDENTIFIED AS EXISTING OR OTHERWISE NOTED ON THE DRAWINGS, TO PRODUCE FULLY FUNCTIONAL AND COMPLETE SYSTEMS.
2.	EXCEPT WHERE SPECIFICALLY DIMENSIONED OR OTHERWISE LOCATED BY PERTINENT DETAILS, THE ROUTING OF CONDUITS SHOWN ON PLANS IS APPROXIMATE. THE CONTRACTOR MAY MODIFY CONDUIT ROUTINGS SHOWN ON DRAWINGS TO ACCOMMODATE EXISTING FIELD CONDITIONS, PROVIDED THAT PROPER PULL BOXES ARE PROVIDED TO FACILITATE CABLE PULLING. THE EXACT ROUTING AND METHODS OF SUPPORT SHALL BE DETERMINED IN THE FIELD, AND APPROVED BY THE COR.
3.	ALL WORK SHALL BE DONE IN ACCORDANCE WITH FEDERAL REGULATIONS, INCLUDING THE AMERICANS WITH DISABILITIES ACT – ADA, GSA PBS–100, OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA), ALL STATE CODES AND REGULATIONS GOVERNING THE INSTALLATION, INCLUDING BUT NOT LIMITED TO THE CURRENT EDITION OF THE FOLLOWING CODES: a. NFPA 70 – 2014, NATIONAL ELECTRICAL CODE b. NFPA 72 – 2010, NATIONAL FIRE ALARM CODE c. NFPA 90A – 2009, STANDARD FOR THE INSTALLATION OF A/C AND VENTILATION SYSTEMS d. NFPA 99 – 2009, HEALTH CARE FACILITY CODE e. NFPA 101 – 2009, LIFE SAFETY CODE f. NFPA 110 – 2009, STANDARD FOR EMERGENCY AND STANDBY POWER SYSTEMS g. VA FIRE PROTECTION DESIGN MANUAL h. VA ELECTRICAL DESIGN MANUAL FOR HOSPITALS i. VA MISSION CRITICAL FACILITIES DESIGN MANUAL
4.	ALL 600 VOLT ELECTRICAL POWER CONDUCTORS SHALL BE COPPER, INSULATION TYPE XHHW OR DUAL RATED THHN/THWN, RATED 90 DEGREES CENTIGRADE, AND INSTALLED IN RACEWAY PER CODE AND SPECIFICATION REQUIREMENTS.
5.	THE CONTRACTOR SHALL PROVIDE ALL NECESSARY MATERIALS, LABOR AND ATTENDANCE FOR THE OPERATION OF TEMPORARY LIGHT AND CONSTRUCTION POWER AS REQUIRED DURING WORKING HOURS FOR THE ENTIRE CONSTRUCTION PERIOD.
6.	THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS. ALL DISCREPANCIES THAT MAY INTERFERE WITH THE PROJECT SHALL BE REPORTED TO THE COR BEFORE STARTING WORK.
7.	ALL CONDUITS SHALL BE 3/4" MINIMUM SIZE UNLESS OTHERWISE NOTED. POWER CONDUITS SHALL BE RIGID GALVANIZED STEEL (RGS) IN MECHANICAL AND ELECTRICAL ROOMS, PROCESS AREA AND CHEMICAL ROOMS SHALL USE PVC COATED RIGID GALVANIZED STEEL CONDUIT (ROB–ROY) AND ALL OTHER ABOVE GRADE AREAS SHALL BE RGS. ALL UNDERGROUND CONDUIT SHALL BE SCHEDULE 80 PVC. FLEXIBLE OR LIQUIDTIGHT FLEXIBLE CONDUIT MAY BE USED IN LENGTHS NOT EXCEEDING 5' TO CONNECT LIGHTING FIXTURES OR VIBRATING EQUIPMENT.
8.	ALL RACEWAYS, WIRING AND OTHER WORK IS NEW UNLESS SPECIFICALLY INDICATED OTHERWISE ON DRAWINGS OR DESCRIBED IN SPECIFICATIONS.
9.	MAINTAIN THE CONTINUITY OF EXISTING CIRCUITS THAT ARE NOT BEING REMOVED UNDER THIS CONTRACT, BUT WHICH MAY BE AFFECTED BY THIS WORK. PROVIDE CONDUIT, WIRING, ETC. THAT MAY BE NECESSARY TO MAINTAIN THE FUNCTIONALITY OF ALL EXISTING CIRCUITS AND SYSTEMS.
10.	ALL WALLS, FLOORS AND OTHER SURFACES THAT ARE CUT OR DRILLED IN ORDER TO EXECUTE THE WORK SHALL BE PATCHED AND FINISHED TO MATCH ADJACENT SURFACES. PROVIDE FIRE PROOFING AS REQUIRED; SEE NOTE 18.
11.	ALL EQUIPMENT THAT IS REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR, UNLESS INDICATED OTHERWISE BY THE COR, AND SHALL BE REMOVED FROM THE PREMISES AND DISPOSED OF IN ACCORDANCE WITH ALL APPLICABLE LAWS, ORDINANCES AND REQUIREMENTS.
12.	ALL NEW CONDUIT SHALL BE RUN ABOVE CEILINGS, IN HOLLOW WALLS OR OTHERWISE CONCEALED WHEREVER POSSIBLE.
13.	ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR THE ENTIRE SET OF DRAWINGS TO INCLUDE THE REMOVAL, RELOCATION, DISCONNECT OR CONNECTION OF EXISTING AND PROPOSED EQUIPMENT AND UTILITIES.
14.	MAINTAIN EXISTING FIRE ALARM, DETECTION, COMMUNICATIONS, SECURITY AND OTHER SYSTEMS FULLY OPERATIONAL AND IN SERVICE AT ALL TIMES, UNLESS OTHERWISE APPROVED IN WRITING BY THE COR. THE CONTRACTOR SHALL COMPLY WITH NFPA 101 IF FIRE ALARM OR SPRINKLER SYSTEMS WILL BE OUT OF SERVICE DUE TO PROJECT RELATED WORK. A FIRE WATCH, AT THE CONTRACTOR'S EXPENSE, SHALL BE PROVIDED AS REQUIRED OR DIRECTED.
15.	ALL ASBESTOS CONTAINING MATERIALS (ACM) AND LEAD PAINT KNOWN TO THE VA HAVE BEEN REMOVED, ABATED, OR ARE NOT IN AREAS AFFECTED BY THIS WORK. SHOULD THE CONTRACTOR ENCOUNTER ANY SUSPECTED ACM OR LEAD PAINT WHILE PERFORMING WORK, NOTIFY THE COR IMMEDIATELY.
16.	THE CONTRACTOR SHALL COOPERATE FULLY WITH ALL VA PERSONNEL DURING CONSTRUCTION OPERATIONS TO MINIMIZE CONFLICTS AND INCONVENIENCE TO FACILITY OPERATIONS. PERFORM ALL WORK DURING NORMAL FACILITY WORKING HOURS, EXCEPT FOR THOSE TASKS REQUIRING POWER OUTAGES WHICH MUST BE DONE NIGHTS/WEEKENDS AS APPROVED BY THE COR 7 DAYS IN ADVANCE OF SUCH OUTAGE. ALL NECESSARY CORE DRILLING MUST BE PERFORMED BY THE CONTRACTOR AND MUST BE SCHEDULED AND APPROVED BY THE COR 48 HOURS IN ADVANCE. THE CONTRACTOR SHALL NOT INTERFERE WITH BUILDING OPERATIONS. THE FACILITY IS OCCUPIED AND OPERATIONAL 24 HOURS, 7 DAYS PER WEEK.
17.	THE CONTRACTOR SHALL MAINTAIN ALL MEANS OF EGRESS FROM THE WORKPLACE FREE OF OBSTRUCTIONS OR IMPEDIMENTS TO TRAVEL, SO THAT PERSONNEL WILL HAVE IMMEDIATE AND UNINHIBITED PASSAGE FROM OR THROUGH THE WORKPLACE IN THE EVENT OF A FIRE OR OTHER EMERGENCY. THE CONTRACTOR WILL AT ALL TIMES PREVENT ANY MATERIALS OR DEBRIS FROM BLOCKING ACCESS TO EXITS AND PASSAGEWAYS TO EXITS. CONSTRUCTION MATERIALS SHALL BE SECURELY STORED, WITH DEBRIS REMOVED AT THE END OF EACH WORK DAY.
18.	THE CONTRACTOR SHALL PATCH AND SEAL ALL OPENINGS IN WALLS, FLOORS OR CEILINGS WITH UL OR FM APPROVED FIRE RESISTIVE MATERIALS, AS FURTHER DESCRIBED IN SPECIFICATIONS AND DRAWING DETAILS. THE RATING OF THE FIRESTOPPING MUST AT LEAST EQUAL THE RATING OF THE EXISTING BARRIER (SMOKE TIGHT, 1–HOUR FIRE RATED, 2–HOUR FIRE RATED, ETC.) OPENINGS IN FLOORS MUST BE SEALED AT THE END OF EACH WORK DAY WITH TEMPORARY "FIRE STOPS"OR "FIRE PLUGS" UNTIL THE PERMANENT FIRE STOPPING MATERIALS ARE APPLIED.
19.	THE CONTRACTOR MUST NOT WORK ON ANY ENERGIZED EQUIPMENT ON THIS PROJECT UNLESS APPROVED BY THE COR. ALL CONTRACTOR PERSONNEL MUST UTILIZE APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT (PPE) FOR WORKING CONDITIONS ENCOUNTERED.
20.	ALL ELECTRICAL EQUIPMENT THAT IS SHUT DOWN FOR REPLACEMENT OR MODIFICATION SHALL BE LOCKED–OUT AND TAGGED–OUT. THE CONTRACTOR SHALL SUBMIT A LOCK–OUT / TAG–OUT PLAN TO THE COR FOR APPROVAL PRIOR TO STARTING WORK, WHICH SHALL BE COORDINATED WITH THE FACILITY ELECTRICAL SHOP.
21.	THE CONTRACTOR SHALL PROVIDE TEMPORARY CONSTRUCTION BARRIERS AS REQUIRED AND AS DIRECTED TO PREVENT DUST IN CONSTRUCTION AREAS FROM ENTERING THE OCCUPIED AREAS.
22.	CONTRADICTORY OR MISSING INFORMATION ON THESE DRAWINGS, SUCH AS WIRE SIZES, CIRCUIT BREAKER AMPS OR NUMBER OF POLES, ETC., WHICH ARE FOUND TO BE DIFFERENT FROM ACTUAL FIELD CONDITIONS OBSERVED WHILE PERFORMING WORK UNDER THIS CONTRACT, SHALL BE CAREFULLY MARKED ON THE AS–BUILT DRAWINGS.
23.	ABANDONED UNUSED WIRING/CONDUIT OR DEVICES SHALL NOT BE LEFT ANYWHERE IN PROJECT AREA, INCLUDING AREA ABOVE CEILINGS. REMOVE ALL UNUSED WIRING/CONDUIT BACK TO SOURCE PANEL.

ABBREVIATIONS			
A, AMP	AMPERE	KW	KILOWATT
AC	ALTERNATING CURRENT	LTG	LIGHTING
AF	AMPERE FRAME	MFR	MANUFACTURER
AFF	ABOVE FINISHED FLOOR	MCB	MAIN CIRCUIT BREAKER
APPROX	APPROXIMATELY	MER	MECHANICAL EQUIPMENT ROOM
AUX	AUXILIARY	MIN	MINIMUM
AWG	AMERICAN WIRE GAUGE	MISC	MISCELLANEOUS
BKR	BREAKER	MLO	MAIN LUGS ONLY
BLDG	BUILDING	MTD	MOUNTED
C, CDT	CONDUIT	N, NEUT	NEUTRAL
CAT	CATALOG	N/C	NORMALLY CLOSED
CKT BKR	CIRCUIT BREAKER	NEC	NATIONAL ELECTRIC CODE
CKT(S)	CIRCUIT(S)	N/O	NORMALLY OPEN
COR	VA CONTRACTING OFFICER	PNL	PANEL
		PWR	POWER
CRI	COLOR RENDERING INDEX	RECEPT	RECEPTACLE
DISC	DISCONNECT	REF	REFERENCE
DWG(S)	DRAWING(S)	REQD	REQUIRED
ELECT	ELECTRIC, ELECTRICAL	RGS	RIGID GALVANIZED STEEL
EM, EMERG	EMERGENCY	SP	SINGLE POLE
EQUIP	EQUIPMENT	SPEC	SPECIFICATION
EXIST	EXISTING	SPST	SINGLE POLE SINGLE THROW
FA	FIRE ALARM	SW	SWITCH
FACP	FIRE ALARM CONTROL PANEL	SYM	SYMMETRICAL
FDR	FEEDER	SYS	SYSTEM
FIXT	FIXTURE	SUPPT	SUPPORT
G, GND, GRD	GROUND	TEL	TELEPHONE
G.F.	GOVERNMENT FURNISHED	TEMP	TEMPERATURE
GFI	GROUND FAULT CIRCUIT INTERRUPT	THD	TOTAL HARMONIC DISTORTION
GOVT.	GOVERNMENT	UNO	UNLESS NOTED OTHERWISE
HP	HORSEPOWER	V	VOLT
HTR	HEATER	VAC	VOLTS ALTERNATING CURRENT
J.BOX	JUNCTION BOX	W	WATT
KVA	KILOVOLT AMPERE	WP	WEATHER PROOF
		W/	WITH

PROJECT NOTES	
1.	ALL BRANCH CIRCUITS ARE 2#12 & #12G – 3/4"C UNO.
2.	ALL FEEDERS, BRANCH CIRCUITS AND COMMUNICATION WIRING ARE INSTALLED IN CONDUIT, RECESSED IN WALLS AND / OR RUN ABOVE HUNG CEILING. EXPOSED CONDUIT IN RAW WATER PUMP STATION AREAS SHALL BE RUN PLUMB AND SQUARE.
3.	INSTALL ALL RECEPTACLES 18"AFF UNO.
4.	ALL LIGHTING FIXTURES CONTROLLED BY OCCUPANCY SENSORS SHALL BE PROVIDED COMPATIBLE WITH SENSOR REQUIREMENTS.

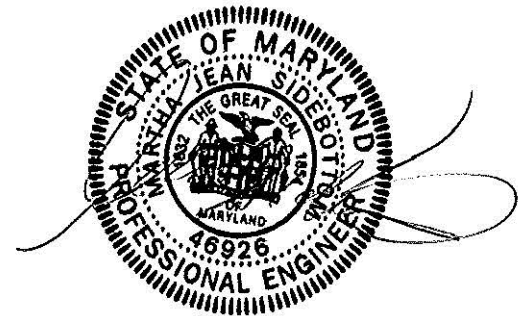
COORDINATION NOTES	
1.	EQUIPMENT TAGS SHOWN ON ELECTRICAL PLANS ARE IN COORDINATION WITH MECHANICAL, PLUMBING AND PROCESS EQUIPMENT TAGS. REFER TO APPROPRIATE TRADE SCHEDULE SHEETS FOR FURTHER DETAILS.
2.	ALL FEEDERS, BRANCH CIRCUITS AND COMMUNICATION WIRING ARE INSTALLED IN CONDUIT SHALL BE RUN PLUMB AND SQUARE AND AVOID CONFLICTS WITH BRIDGE CRANE AREA.
3.	CONDUIT RUNS ARE SHOWN FOR DIAGRAMMATICAL INFORMATION ONLY. ALL ROUTING SHALL BE COORDINATE IN FIELD AND NOTED ON AS–BUILTS.
4.	ELECTRICAL CONTRACTOR MAY COMBINE HOME RUNS IN SAME CONDUIT PER NEC AND DERATING CODES.
5.	SIZE OF PULL BOXES AND LOCATIONS SHALL BE DETERMINED INFIELD AND SHALL BE IN ADHERENCE TO NEC.
6.	CONTRACTOR CAN COMBINE PROCESS INSTRUMENTATION WIRING IN CONDUITS WHILE MAINTAINING DI/DO, AI/AO, AND 120V SEPARATION. COORDINATE QUANTLY AND EXACT LOCATION WITH PROCESS EQUIPMENT BEING PURCHASED AND INSTALLED.

POWER LEGEND	
#	KEY NOTE
# # #	EQUIPMENT TAG
—	NEW ABOVE GRADE / SLAB CONDUIT
— — —	NEW UNDERGROUND / BELOW SLAB CONDUIT
480/277V 3PH	PANELBOARD
208/120V 3PH	PANELBOARD
T	TRANSFORMER
WORKING CLEARANCE	
MCC SECTIONS	
HOME RUN	
CIRCUITING BETWEEN DEVICES	
JUNCTION BOX	
DUPLEX RECEPTACLE 120V 20A MOUNTED AT 18" AFF UNO	
DUPLEX GFCI RECEPTACLE 120V 20A MOUNTED AT 18" AFF UNO	
DUPLEX GFCI COUNTER HEIGHT RECEPTACLE 120V 20A MOUNTED AT 48"AFF UNO	
QUADRAPLEX RECEPTACLE 120V 20A MOUNTED AT 18" AFF UNO	
QUADRAPLEX GFCI RECEPTACLE 120V 20A MOUNTED AT 18" AFF UNO	
SPECIAL PURPOSE RECEPTACLE NOTE INDICATES NEMA TYPE	
UNFUSED DISCONNECT	
MOTOR WITH HORSE POWER RATING	

ONE LINE LEGEND	
#	KEY NOTE
# # #	EQUIPMENT TAG
—	NEW ABOVE GRADE / SLAB CONDUIT
— — —	NEW UNDERGROUND / BELOW SLAB CONDUIT
PANEL / ENCLOSURE	
CIRCUIT BREAKER	
TRANSFORMER	
FUSED SWITCH	
GENERATOR	
VARIABLE FREQUENCY DRIVE	

LIGHTING LEGEND	
#	KEY NOTE
—	NEW ABOVE GRADE / SLAB CONDUIT
— — —	NEW UNDERGROUND / BELOW SLAB CONDUIT
OCCUPANCY SENSOR	
SPST, THREE WAY, FOUR WAY AND OCCUPANCY SENSOR SWITCHES	
LIGHTING FIXTURE SEE LIGHTING FIXTURE FOR ADDITIONAL LEGENDS AND SYMBOLS	
HOME RUN	
CIRCUITING BETWEEN DEVICES	

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR
APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL
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LICENSE NO. 46926, EXPIRATION DATE: 06/11/17



Additions:	Date:
Revisions:	

DCS Infrastructure, LLC

3249 route 112, building 4 suite 1B
Medford, N.Y. 11763

631-320-1706

Approved:

Approved: Chief, Facilities and Engineering:
Approved: Associate Chief for Maintenance And Operations, Perry Point:
Approved: Engineering Projects Supervisor
Approved: Infection Control Officer

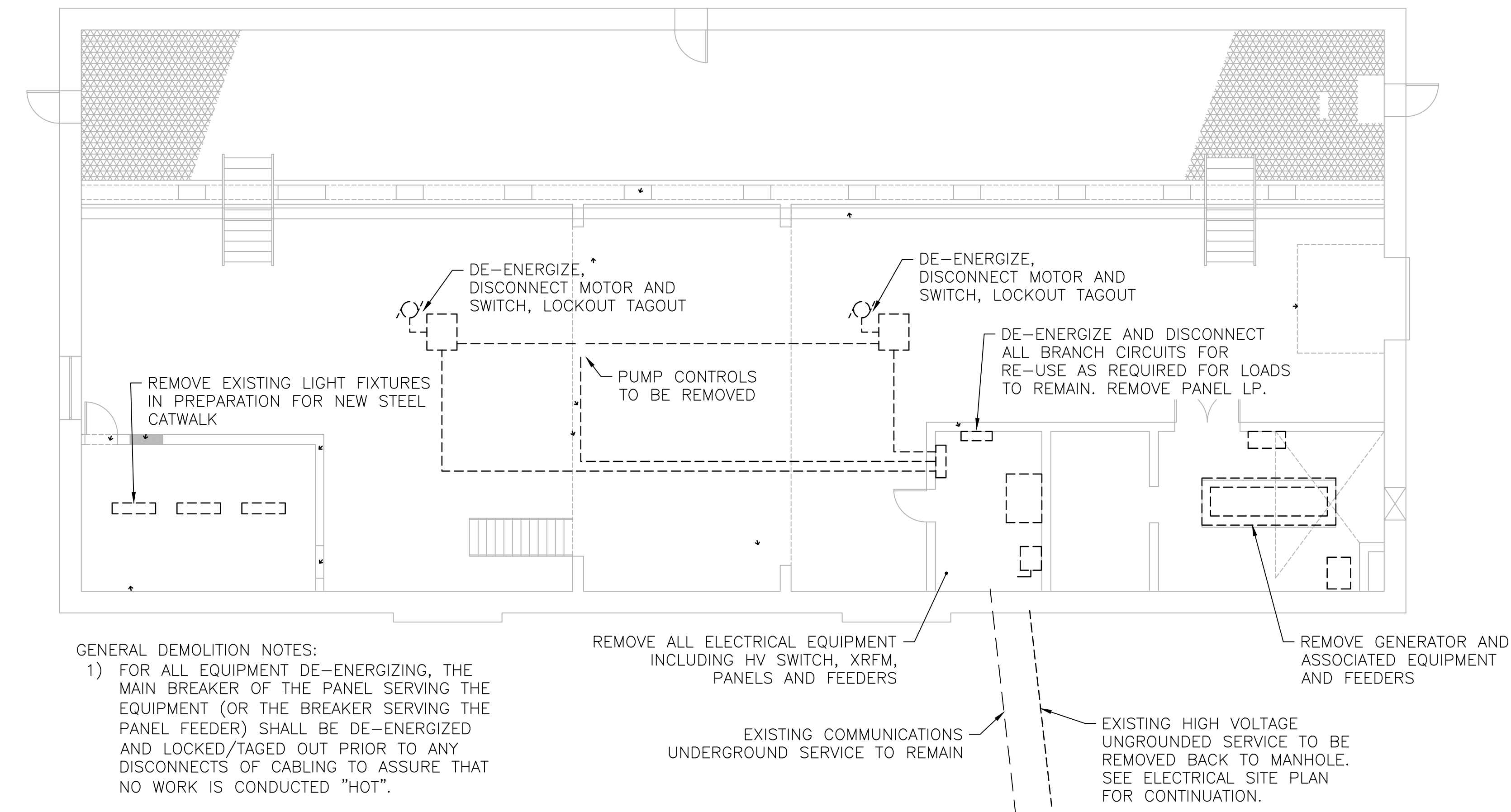
Drawing Title:
ELECTRICAL LEGENDS, NOTES AND ABBREVIATIONS
Approved: Associate Director for Operations:
VAPAHCS PLANNING AND ENGINEERING
Approved: Director, Medical Center:

Project Title:
POTABLE WATER SYSTEM IMPROVEMENTS - TIER 2 PERRY POINT MD VAMC
Scale:
NONE
Building No:
20
Checked:
MJM
Drawn:
MM
Location:
VAMC PERRY POINT, MD 21902

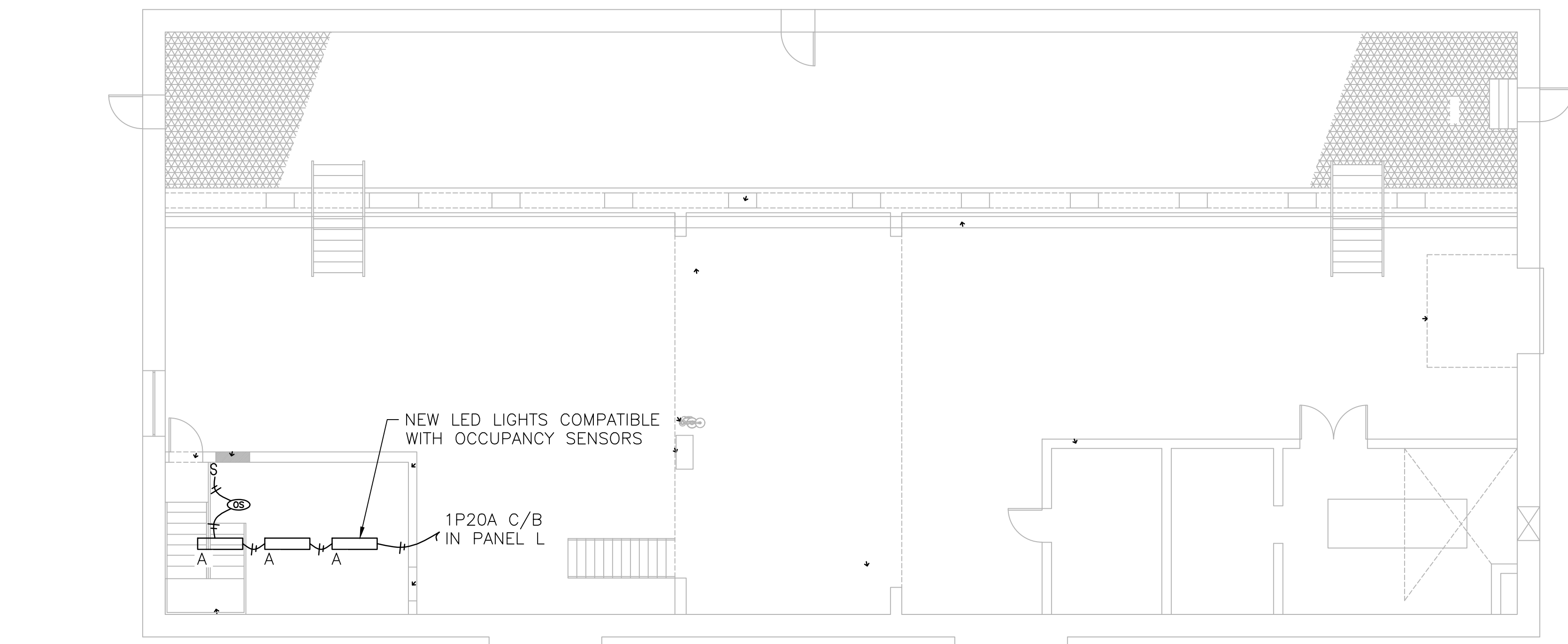
Date:
9/1/2015
Project No:
512A5-13-329
DRAWING NO:
ES-001
12 OF 24



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one and one half inch = one foot
one inch = one foot
three-quarters inch = one foot
one-half inch = one foot
three-eighths inch = one foot
one-quarter inch = one foot
one-eighth inch = one foot



1
ES-003
RAW PUMP STATION ELECTRICAL DEMOLITION PLAN
SCALE: 1/8" = 1'-0"

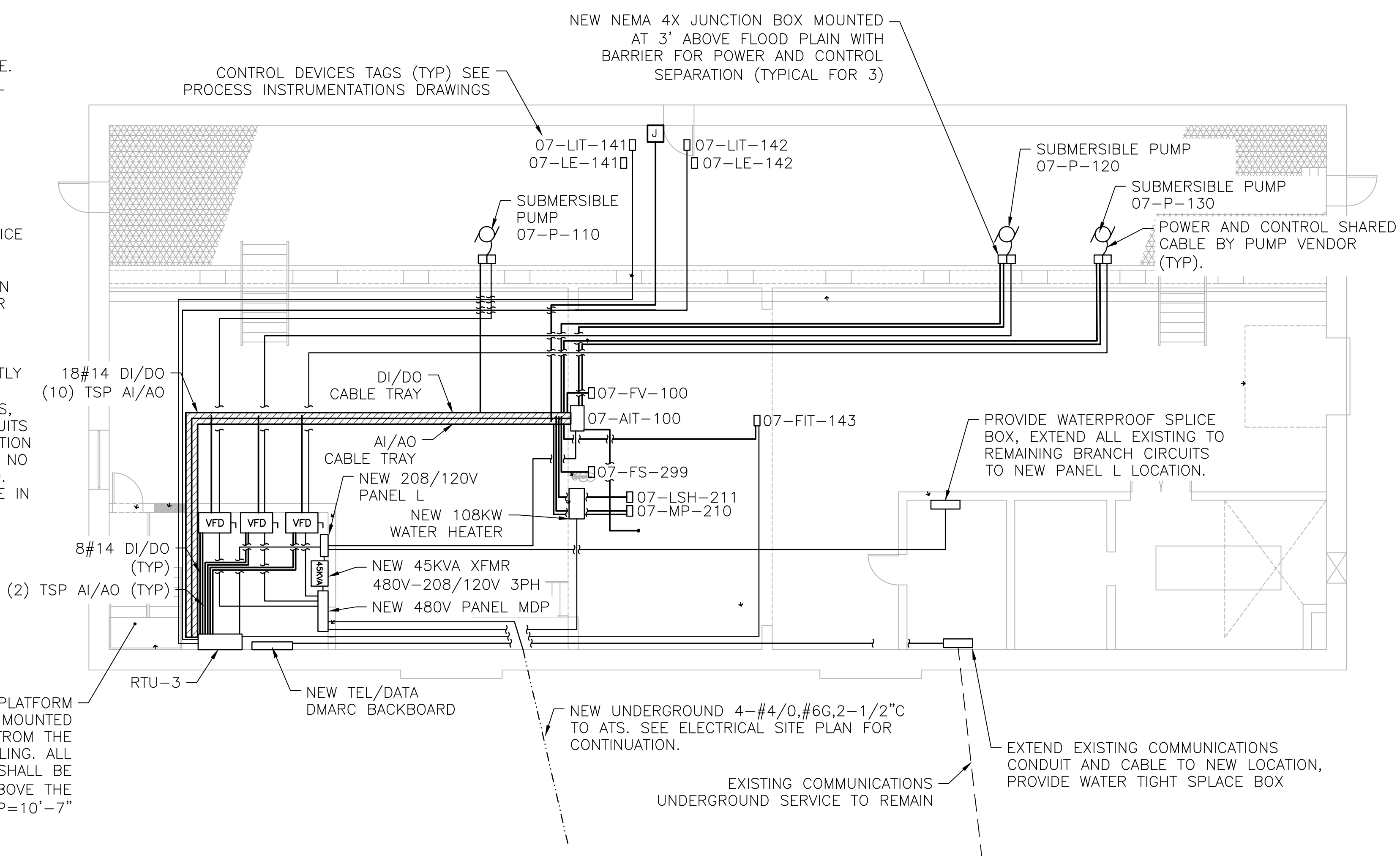


3
ES-003
RAW PUMP STATION ELECTRICAL LIGHTING PLAN
SCALE: 1/8" = 1'-0"

- GENERAL CONSTRUCTION NOTES:
- 1) REFER TO ONE-LINE DIAGRAM SHEET ES-002 FOR FEEDER CONDUIT AND CONDUCTOR SIZE.
 - 2) ALL CONTROL CONDUITS SHALL BE 1"EC WITH DRAG.
 - 3) ALL 120V CIRCUITS SHALL BE 2#12, #12G, 3/4"RGS.

- PHASING NOTES:
- 1) KEEP EXISTING SERVICE TO BUILDING AND PUMPS OPERATIONAL UNTIL NEW SERVICE IS IN PLACE.
 - 2) PUMP REPLACEMENT AND NEW FEEDERS WILL BE BROUGHT ON LINE ONE AT A TIME IN ORDER TO MAINTAIN PUMP STATION OPERATION.
 - 3) ALL LOCKOUT TAGOUT PROCEDURES SHALL BE STRICTLY ENFORCED.
 - 4) EXISTING PUMPS, CONTROLLERS, FEEDERS AND CONTROL CONDUITS TO BE REMOVED IN COORDINATION WITH PHASING REQUIREMENTS. NO ABANDONED CONDUIT ALLOWED. REMOVE EQUIPMENT FROM SITE IN APPROVED MANNER.

NEW EQUIPMENT ON PLATFORM SHALL BE CHANNEL MOUNTED AND SUPPORTED FROM THE FLOOR AND CEILING. ALL EQUIPMENT SHALL BE MOUNTED 3' ABOVE THE FLOOD PLAIN. FP=10'-7"



2
ES-003
RAW PUMP STATION ELECTRICAL NEW POWER PLAN
SCALE: 1/8" = 1'-0"

LIGHTING NOTES

1. CIRCUIT NUMBERS ARE FOR INFORMATIONAL PURPOSES ONLY. CONTRACTOR SHALL ASSIGN IN FIELD AND MARK ON AS-BUILTS. CONTRACTOR IS RESPONSIBLE FOR BALANCING LOADS.
2. CONTRACTOR SHALL DISCONNECT AND REMOVE EXISTING LIGHT FIXTURES SHOWN ON DEMO PLAN.
3. ALL OCCUPANCY SENSOR LOCATIONS ARE APPROXIMATE. REFER TO MANUFACTURER'S INSTALLATION INSTRUCTIONS PRIOR TO INSTALLATION.
4. CEILING MOUNTED OCCUPANCY SENSORS SHOULD BE MINIMUM OF SIX (6') FEET FROM HVAC SUPPLY/ RETURN VENTS. CONTRACTOR IS RESPONSIBLE FOR ADJUSTING SENSOR LOCATIONS TO ALLOW FOR PROPER OPERATION.
5. CONTRACTOR IS RESPONSIBLE FOR PROPER SENSITIVITY AND TIME DELAY SETTING OF OCCUPANCY SENSOR, FOLLOWING THE MANUFACTURER'S RECOMMENDED PLACEMENT, AND FIELD VERIFICATION OF CIRCUITS WITH RESPECT TO POWER PACK PLACEMENT.
6. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION OF REQUIRED NUMBER OF POWER PACKS / ADD-A-RELAYS:
 - A. ONE POWER PACK IS REQUIRED FOR EACH CONTROLLED CIRCUIT.
 - B. REFER TO INSTALLATION GUIDE FOR MAXIMUM NUMBER OF SENSORS THAT CAN BE CONNECTED TO POWER PACKS.
 - C. IF MULTIPLE CIRCUITS ARE TO BE CONTROLLED BY A SINGLE SENSOR, AUXILIARY RELAYS MAY BE USED IN CONJUNCTION WITH A POWER PACK.
7. REFER TO LIGHTING CONTROL SEQUENCE, FOR LIGHTING CONTROL PERFORMANCE SPECIFICATION. THE CONTRACTOR SHALL RETAIN THE SERVICES OF AN APPROVED LIGHTING CONTROL CONSULTANT TO DESIGN THE WIRING AND SYSTEM COMPONENTS TO ACHIEVE THE DESIRED OPERATION. SUBMIT CONTROL WIRED DIAGRAMS FOR APPROVAL BEFORE PURCHASING MATERIALS.

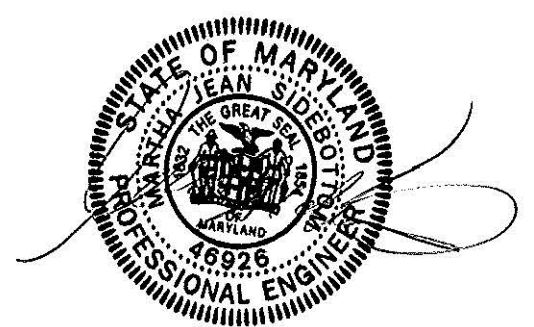
LIGHTING CONTROL SEQUENCE

- NEW ELECTRICAL PLATFORM AREA:**
1. CONTROLLED BY OCCUPANCY SENSORS WITH MANUAL OVERRIDE SWITCH.
 2. LIGHTS AT FULL BRIGHTNESS WITH ACTIVITY IN OCCUPANCY SENSOR AREA OR OVERRIDE SWITCH ENGAGED.
 3. LIGHTS OFF WITH NO ACTIVITY.

LIGHTING FIXTURE SCHEDULE

- MARK - A
SYMBOL - A
- DESCRIPTION - 1'x4' WRAPAROUND
VOLTAGE - 120V
LAMPS - 42W LED 4000K
MOUNTING - SURFACE
REMARKS - DAMP LOCATION
BASIS OF DESIGN:
GE LUMINATION LED
GS-14-0-A3-S-P-WHITE
- NOTES:
- 1) PROVIDE TRIM AND ACCESSORIES SUITABLE FOR MOUNTING FIXTURE IN EACH LOCATION INDICATED ON PLANS.
 - 2) VERIFY COLOR, TRIMS, ACCESSORIES WITH ARCHITECT PRIOR TO ORDERING.
 - 3) COORDINATE LOCATIONS AND MOUNTING REQUIREMENTS WITH FIELD CONDITIONS.
 - 4)

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LICENSE NO. 46926, EXPIRATION DATE: 06/11/17



Approved:

Approved: Chief, Facilities and Engineering:

Approved: Associate Chief for Maintenance And Operations, Perry Point:

Approved: Engineering Projects Supervisor

Approved: Infection Control Officer

Drawing Title:

RWPS ELECTRICAL DEMOLITION
AND NEW POWER PLAN

Approved: Associate Director for Operations:

VAPAHCs PLANNING AND ENGINEERING

Approved: Director, Medical Center:

Project Title:

POTABLE WATER
SYSTEM IMPROVEMENTS - TIER 2
PERRY POINT MD
VAMC

Scale:

Building No:

20

Checked:

MJS

Drawn:

MFM

Location:
VAMC PERRY POINT, MD 21902

Date:

9/1/2015

Project No:
512A5-13-329

DRAWING NO:

ES-003

14 OF 24

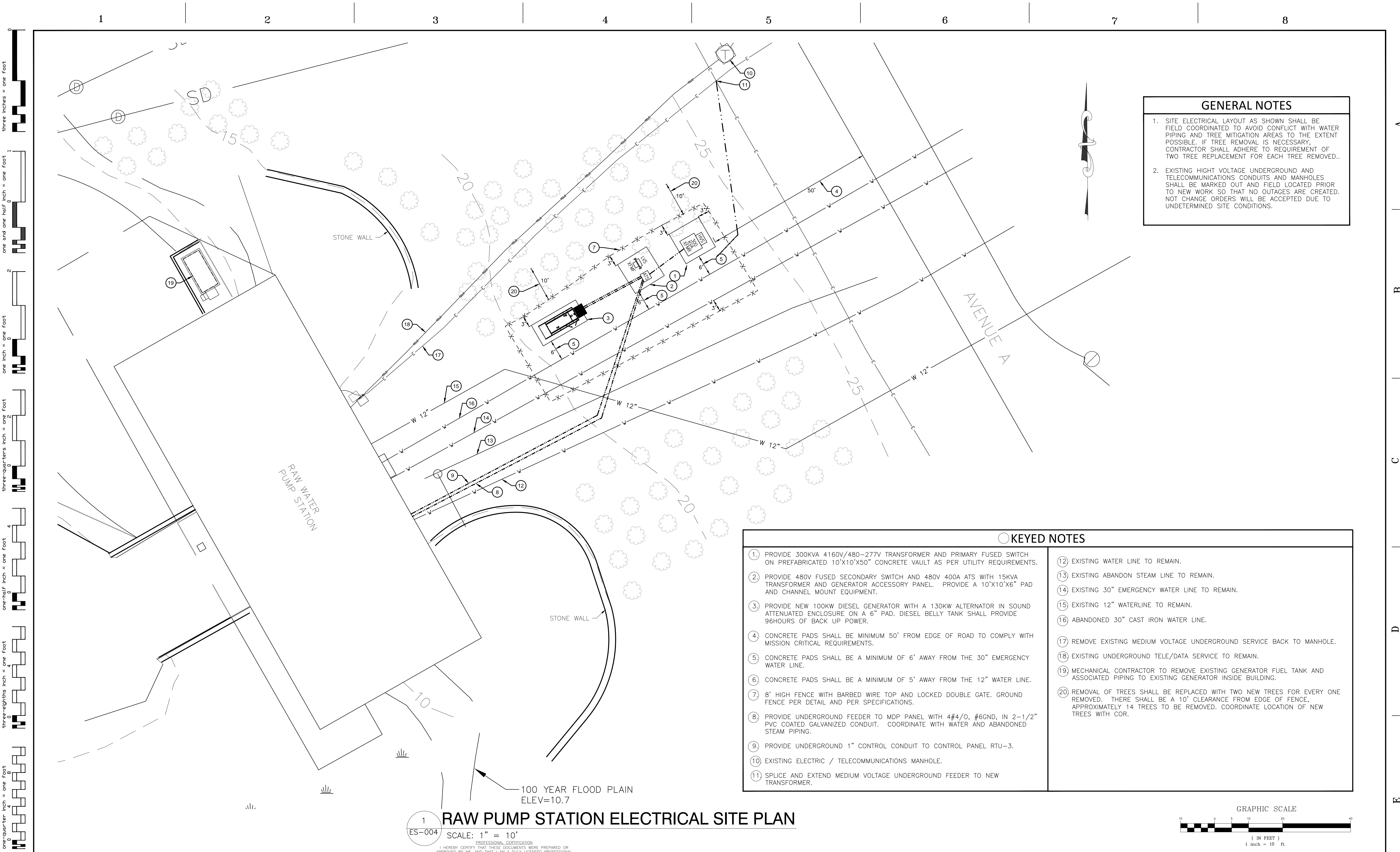
100% Bid Documents September 1, 2015

DEPARTMENT OF
VETERANS AFFAIRS

Additions:	Date:
Revisions:	

DCS Infrastructure, LLC
3249 route 112, building 4 suite 1B
Medford, N.Y. 11763 631-320-1706

**Hatch Mott
MacDonald**



GENERAL NOTES

1. SITE ELECTRICAL LAYOUT AS SHOWN SHALL BE FIELD COORDINATED TO AVOID CONFLICT WITH WATER PIPING AND TREE MITIGATION AREAS TO THE EXTENT POSSIBLE. IF TREE REMOVAL IS NECESSARY, CONTRACTOR SHALL ADHERE TO REQUIREMENT OF TWO TREE REPLACEMENT FOR EACH TREE REMOVED..
2. EXISTING HIGHT VOLTAGE UNDERGROUND AND TELECOMMUNICATIONS CONDUITS AND MANHOLES SHALL BE MARKED OUT AND FIELD LOCATED PRIOR TO NEW WORK SO THAT NO OUTAGES ARE CREATED. NOT CHANGE ORDERS WILL BE ACCEPTED DUE TO UNDETERMINED SITE CONDITIONS.

- KEYED NOTES**
1. PROVIDE 300KVA 4160V/480-277V TRANSFORMER AND PRIMARY FUSED SWITCH ON PREFABRICATED 10'X10'X50" CONCRETE VAULT AS PER UTILITY REQUIREMENTS.
 2. PROVIDE 480V FUSED SECONDARY SWITCH AND 480V 400A ATS WITH 15KVA TRANSFORMER AND GENERATOR ACCESSORY PANEL. PROVIDE A 10'X10'X6" PAD AND CHANNEL MOUNT EQUIPMENT.
 3. PROVIDE NEW 100KW DIESEL GENERATOR WITH A 130KW ALTERNATOR IN SOUND ATTENUATED ENCLOSURE ON A 6" PAD. DIESEL BELLY TANK SHALL PROVIDE 96HOURS OF BACK UP POWER.
 4. CONCRETE PADS SHALL BE MINIMUM 50' FROM EDGE OF ROAD TO COMPLY WITH MISSION CRITICAL REQUIREMENTS.
 5. CONCRETE PADS SHALL BE A MINIMUM OF 6' AWAY FROM THE 30" EMERGENCY WATER LINE.
 6. CONCRETE PADS SHALL BE A MINIMUM OF 5' AWAY FROM THE 12" WATER LINE.
 7. 8' HIGH FENCE WITH BARBED WIRE TOP AND LOCKED DOUBLE GATE. GROUND FENCE PER DETAIL AND PER SPECIFICATIONS.
 8. PROVIDE UNDERGROUND FEEDER TO MDP PANEL WITH 4#4/0, #6GND, IN 2-1/2" PVC COATED GALVANIZED CONDUIT. COORDINATE WITH WATER AND ABANDONED STEAM PIPING.
 9. PROVIDE UNDERGROUND 1" CONTROL CONDUIT TO CONTROL PANEL RTU-3.
 10. EXISTING ELECTRIC / TELECOMMUNICATIONS MANHOLE.
 11. SPLICE AND EXTEND MEDIUM VOLTAGE UNDERGROUND FEEDER TO NEW TRANSFORMER.
 12. EXISTING WATER LINE TO REMAIN.
 13. EXISTING ABANDON STEAM LINE TO REMAIN.
 14. EXISTING 30" EMERGENCY WATER LINE TO REMAIN.
 15. EXISTING 12" WATERLINE TO REMAIN.
 16. ABANDONED 30" CAST IRON WATER LINE.
 17. REMOVE EXISTING MEDIUM VOLTAGE UNDERGROUND SERVICE BACK TO MANHOLE.
 18. EXISTING UNDERGROUND TELE/DATA SERVICE TO REMAIN.
 19. MECHANICAL CONTRACTOR TO REMOVE EXISTING GENERATOR FUEL TANK AND ASSOCIATED PIPING TO EXISTING GENERATOR INSIDE BUILDING.
 20. REMOVAL OF TREES SHALL BE REPLACED WITH TWO NEW TREES FOR EVERY ONE REMOVED. THERE SHALL BE A 10' CLEARANCE FROM EDGE OF FENCE, APPROXIMATELY 14 TREES TO BE REMOVED. COORDINATE LOCATION OF NEW TREES WITH COR.

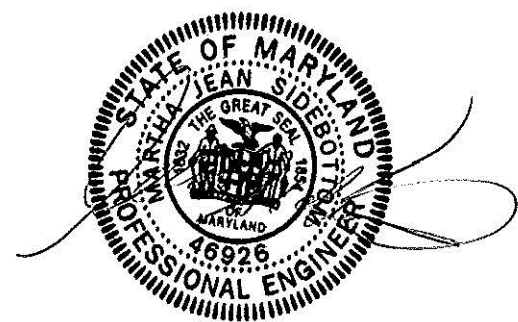
RAW PUMP STATION ELECTRICAL SITE PLAN

1
ES-004
SCALE: 1" = 10'
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Hatch Mott MacDonald



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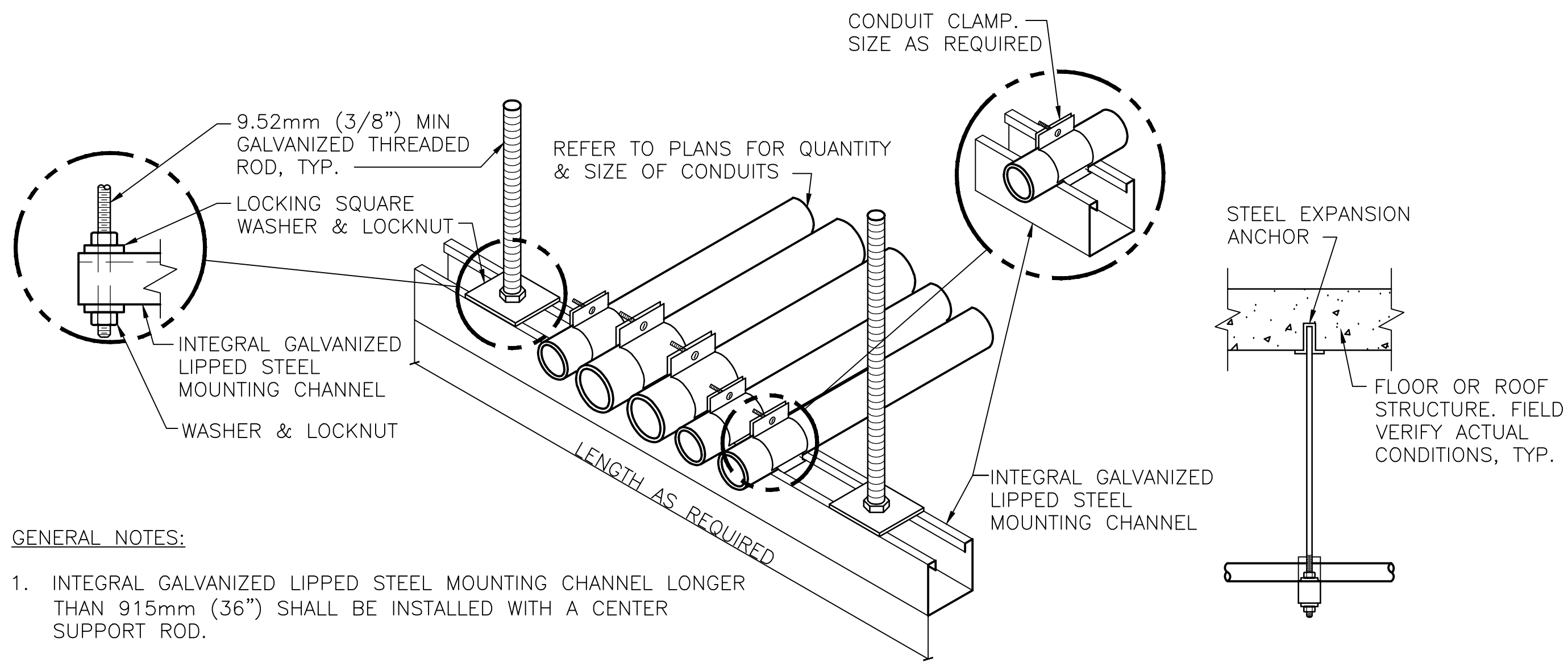
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Project Title:
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PERRY POINT MD VAMC
Scale:
Building No:
20
Checked:
MJS
Drawn:
MFM
Location:
VAMC PERRY POINT, MD 21902

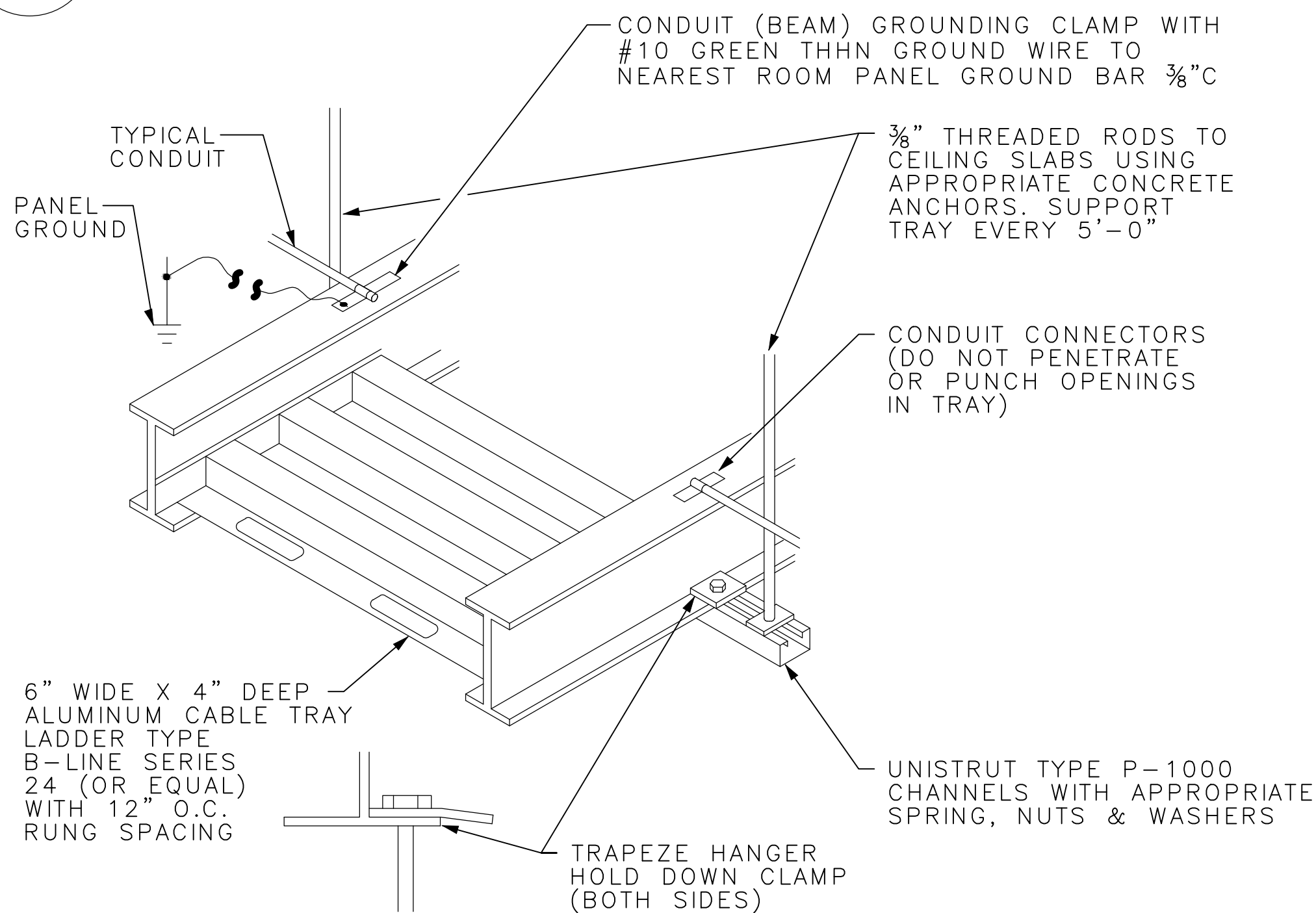
Date:
9/1/2015
Project No:
512A5-13-329
DRAWING NO:
ES-004
15 OF 24



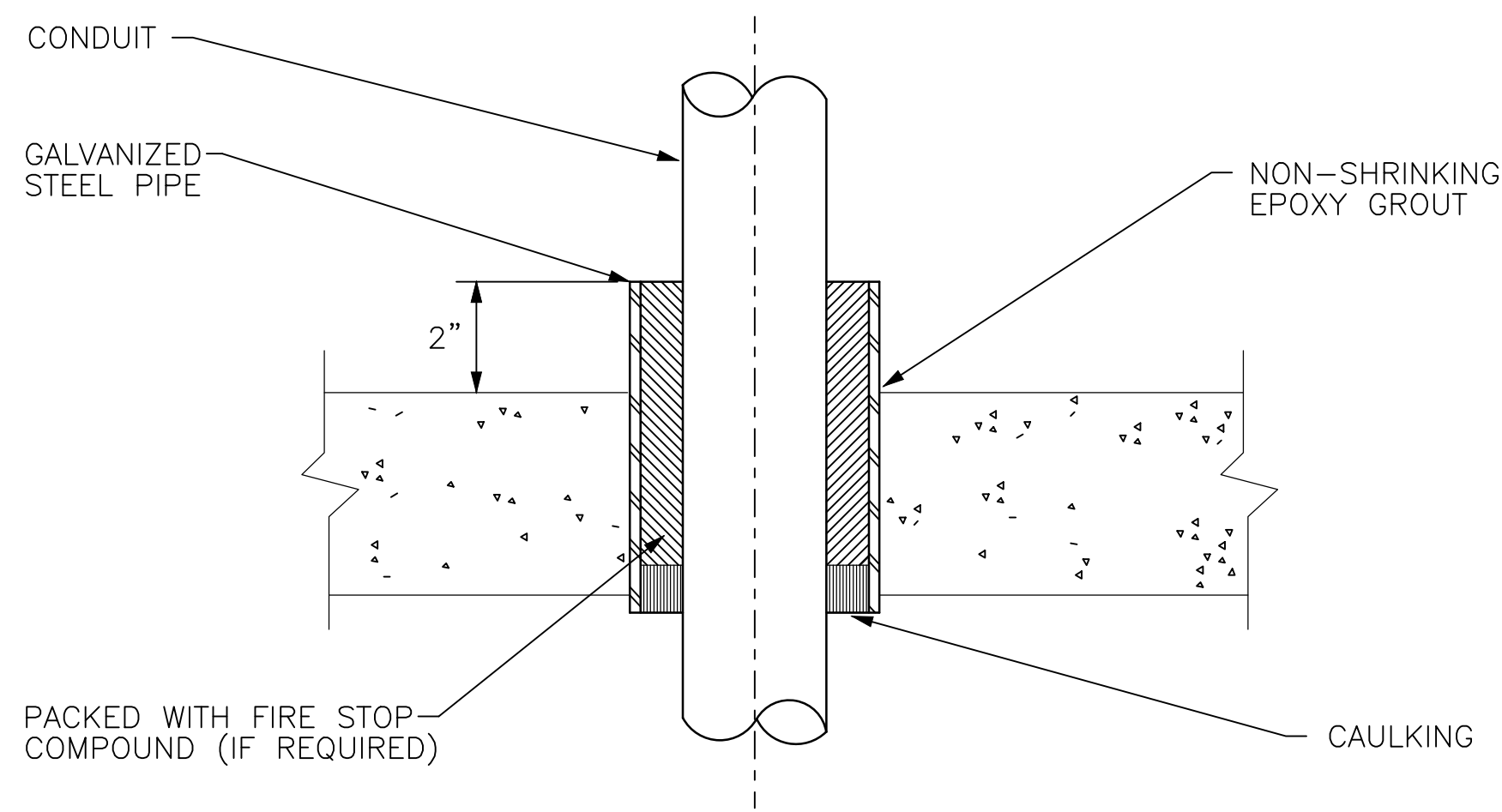


- GENERAL NOTES:
1. INTEGRAL GALVANIZED LIPPED STEEL MOUNTING CHANNEL LONGER THAN 915mm (36\") SHALL BE INSTALLED WITH A CENTER SUPPORT ROD.
 2. FASTEN THREADED ROD TO STRUCTURE BY APPROVED METHOD PER SPECIFICATION 26 05 33, RACEWAY AND BOXES FOR ELECTRICAL SYSTEMS. FIELD VERIFY EXACT CONDITIONS.

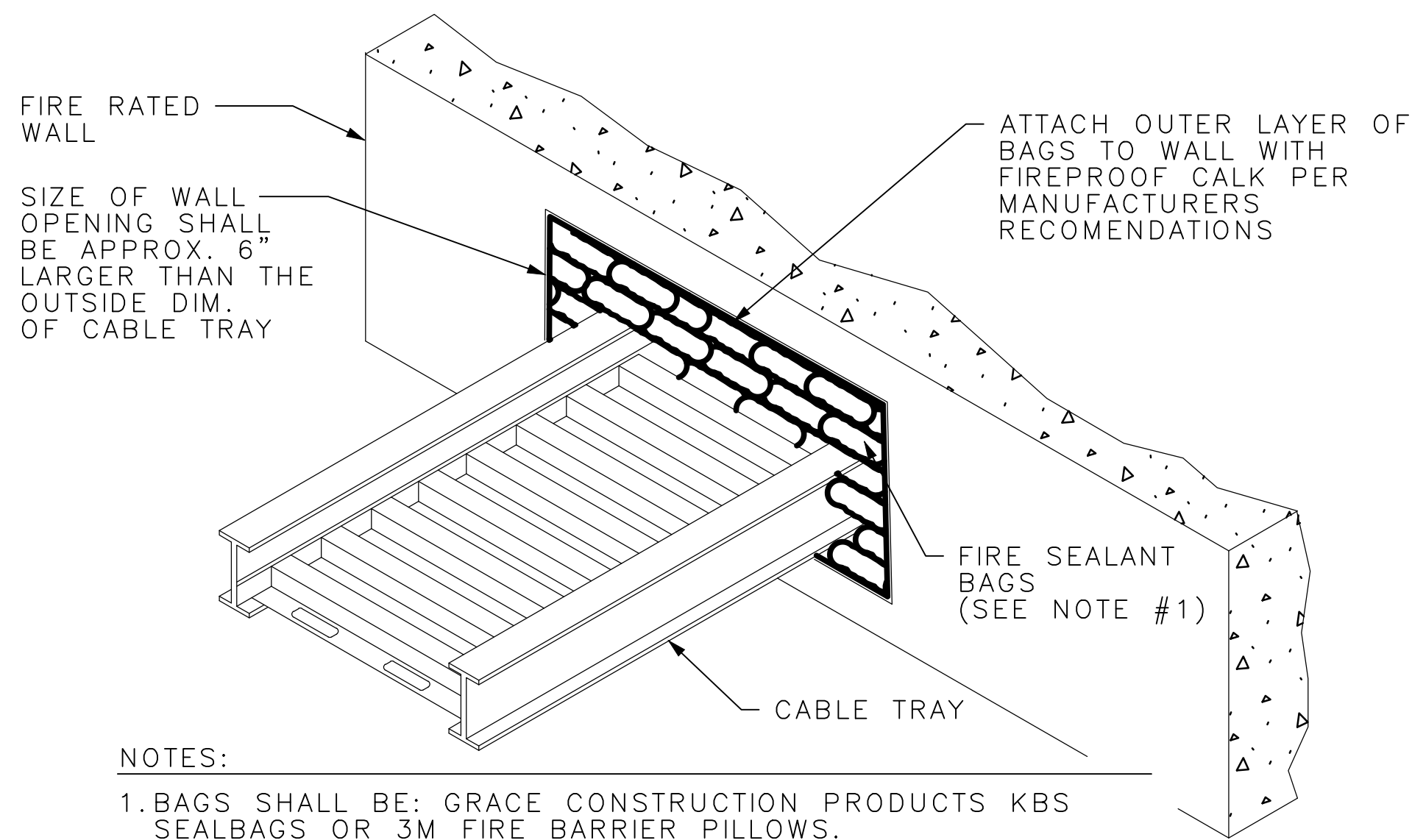
1 CONDUIT TRAPEZE MOUNTING DETAIL
ES-005 SCALE: N.T.S.



4 CABLE TRAY MOUNTING DETAIL
ES-005 SCALE: N.T.S.

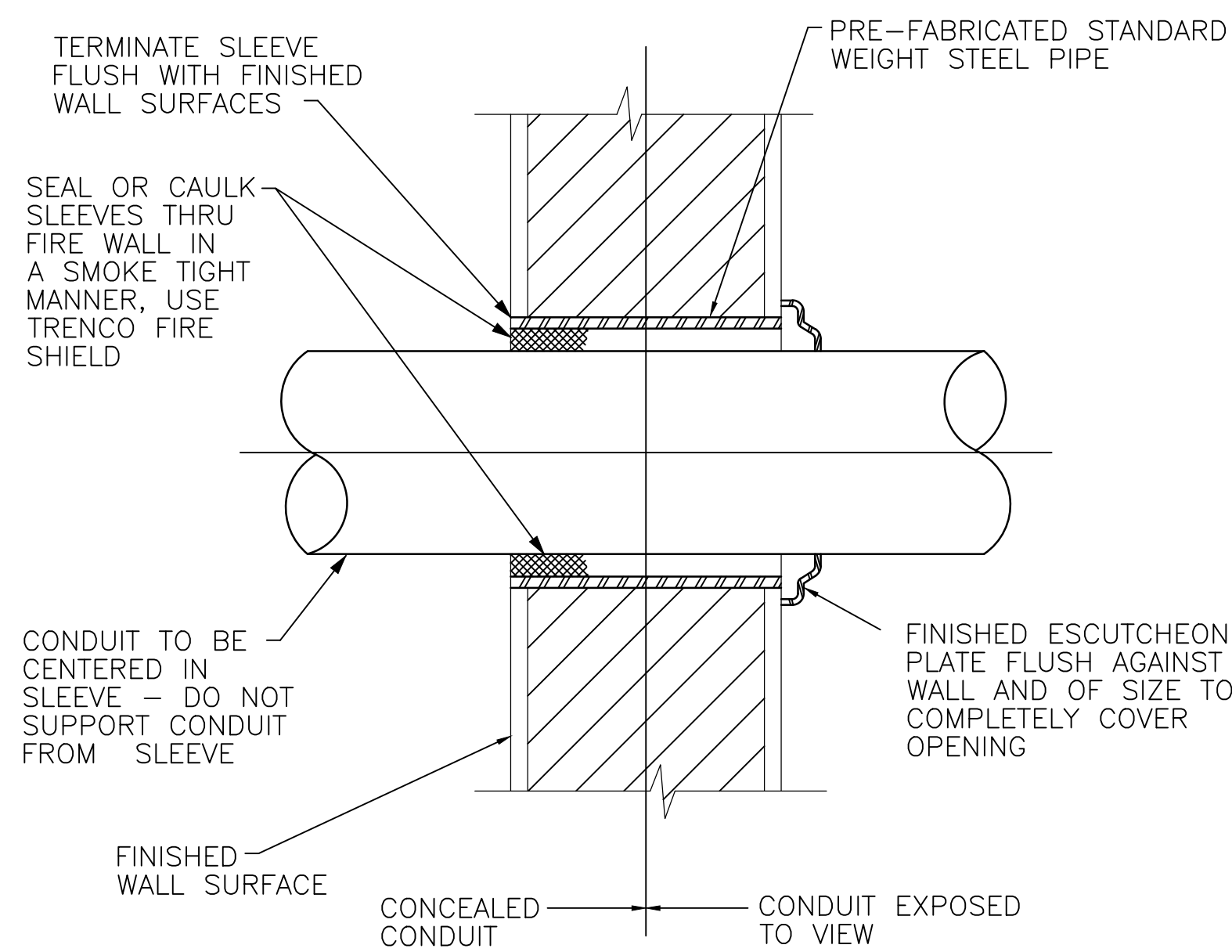


2 CONDUIT PENETRATION THRU NEW FLOOR
ES-005 SCALE: N.T.S.

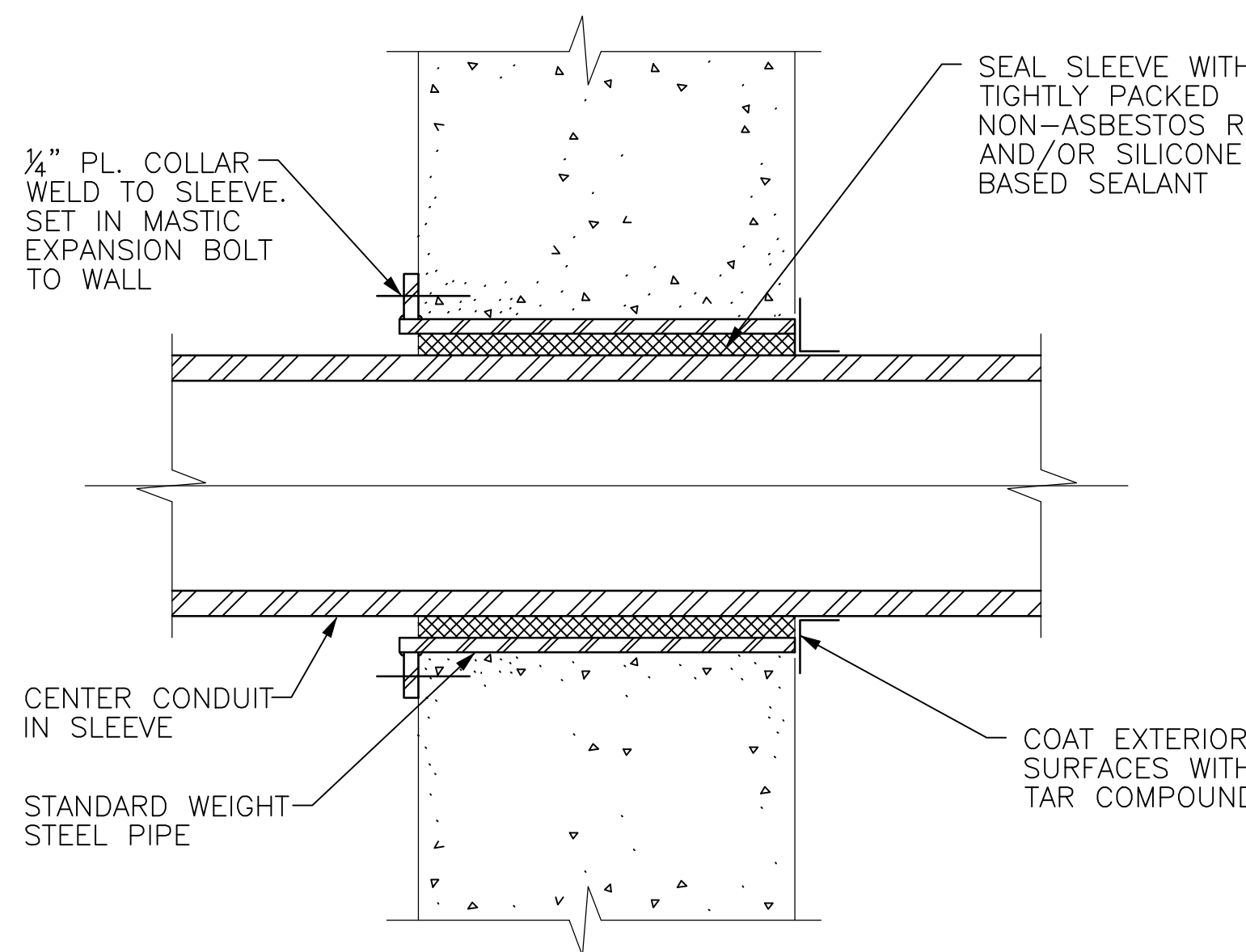


- NOTES:
1. BAGS SHALL BE: GRACE CONSTRUCTION PRODUCTS KBS SEALBAGS OR 3M FIRE BARRIER PILLOWS.
 2. INSTALL BAGS PER MANUFACTURERS INSTRUCTIONS TO ACHIEVE UL CLASSIFIED FIRE RATING EQUAL TO OR GREATER THAN FIRE RATING OF WALL.
 3. SCHEDULE INSTALLATION FOR END OF PROJECT TO ALLOW OTHERS TIME TO INSTALL CABLES.

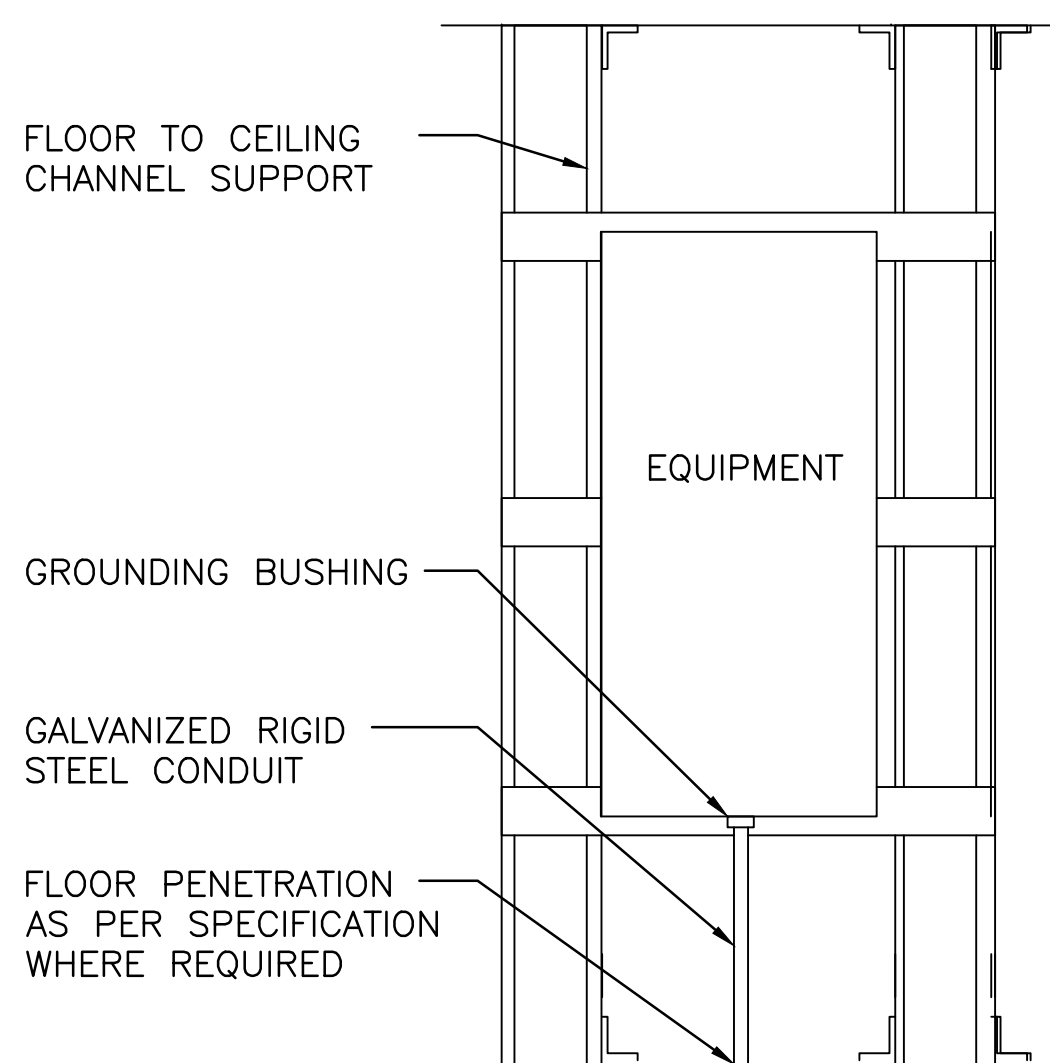
5 CABLE TRAY THROUGH FIRE RATED WALL
ES-005 SCALE: N.T.S.



3 CONDUIT SLEEVE THRU INTERIOR WALL DETAIL
ES-005 SCALE: N.T.S.

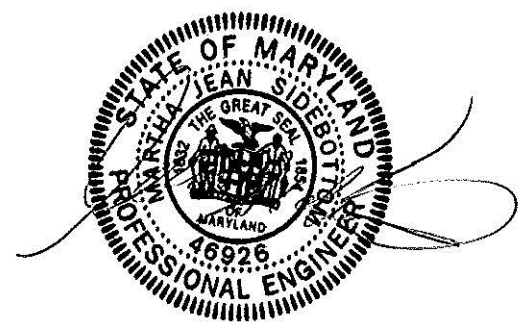


6 CONDUIT PENETRATION THRU EXTERIOR WALL
ES-005 SCALE: N.T.S.



8 TYPICAL CHANNEL SUPPORT DETAIL
ES-005 SCALE: N.T.S.

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR
APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL
ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
LICENSE NO. 46926, EXPIRATION DATE: 06/11/17



Approved:	

Approved: Chief, Facilities and Engineering:	
Approved: Associate Chief for Maintenance And Operations, Perry Point:	
Approved: Engineering Projects Supervisor	
Approved: Infection Control Officer	

Drawing Title:	ELECTRICAL DETAILS
Approved: Associate Director for Operations:	VAPAHS PLANNING AND ENGINEERING
Approved: Director, Medical Center:	

Project Title:			
POTABLE WATER SYSTEM IMPROVEMENTS - TIER 2			
PERRY POINT MD VAMC			
Scale:	Building No:	Checked:	Drawn:
NONE	20	MJS	MM
Location:			
VAMC PERRY POINT, MD 21902			

Date:	9/1/2015
Project No:	512A5-13-329
DRAWING NO:	ES-005
16 OF 24	

Additions:	Date:
Revisions:	

DCS Infrastructure, LLC
3249 route 112, building 4 suite 1B
Medford, N.Y. 11763
631-320-1706

100% Bid Documents September 1, 2015

